

mation indicates that it may have an even more important role in preventing life-threatening cardiovascular disease. The protective nature of estrogen on the cardiovascular system should provide a strong impetus for lifelong therapy. By educating and encouraging patients to consider estrogen replacement therapy, physicians may substantially contribute to a reduction of the risk of cardiovascular disease in their postmenopausal women patients.

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Sleeping Position and Sudden Infant Death Syndrome

THE SUDDEN INFANT DEATH SYNDROME (SIDS) is defined as the sudden and unexpected death of an infant in whom a thorough postmortem examination does not show an adequate explanation for death. It is the leading cause of death for infants beyond the perinatal period to 12 months of age. The peak incidence of sudden infant death is from 2 to 4 months of age; 80% of cases occur before age 5 months. Two of 1,000 infants die of SIDS. African Americans and Inuits appear to be at the greatest risk for SIDS and Asians and whites at the least risk.

Epidemiologic studies have identified the following risk factors for the syndrome: prematurity, birth weight low for gestational age, low Apgar scores, inadequate prenatal care, low socioeconomic status, mother younger than 21 years, mother using illicit drugs during pregnancy, and siblings died of SIDS. Several studies have recently reported a striking association between SIDS and sleeping in the prone position. A study from Avon County, England, found a relative risk of 8.8 for sleeping in the prone position. This same study found overheating (by clothing and bedding) to be an independent risk factor for sudden infant death. Studies from the Netherlands and Australia have corroborated this association between SIDS and sleeping prone.

Following the discovery of this association, health care professionals in Avon County altered their advice on sleeping position for infants, recommending instead the side or supine positions—except in infants with chronic gastroesophageal reflux or certain congenital deformities, such as the Pierre Robin syndrome. A follow-up study found that the prevalence of prone sleeping fell from 58% to 28% and the incidence of SIDS fell from 3.5 per 1,000 to 1.7 per 1,000.

The reason for the association between the prone

sleeping position and SIDS is unknown, but some researchers have shown the likelihood of suffocation by rebreathing expired air in infants sleeping prone on certain types of infant bedding, particularly those that are excessively soft and malleable.

The pathophysiology of SIDS remains a riddle. Primary care physicians should encourage their patients to receive prenatal care and forego smoking and drug abuse. Current research suggests that physicians should counsel parents to avoid "bundling" infants with excessive clothing and blankets and to recommend placing infants without contraindications in the supine or side positions to sleep.

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Outpatient Management of Asthma

PRIMARY CARE PHYSICIANS have been asked to help reduce the morbidity and mortality of asthma in the 1990s. In response to the almost 30% rise in asthma prevalence and mortality between 1980 and 1987, the expert panel of the National Asthma Education Program has issued guidelines to improve the detection and treatment of asthma.

Asthma is a chronic condition with acute exacerbations. It is now considered an inflammatory disease in which bronchospasm occurs because of airway inflammation. Treatment requires a continuous care approach to control symptoms, prevent exacerbations, and reduce chronic airway inflammation. The education program's guidelines place emphasis on anti-inflammatory therapy through the use of inhaled corticosteroids and inhaled cromolyn sodium as first-line therapy for moderate to severe asthma.

Clinicians must use objective measures of pulmonary function, such as a home peak-flow meter, to assess and monitor each person's asthma. With appropriate pharmacologic therapy, environmental control, and education, patients and their families can achieve control of this condition. Just as people with diabetes mellitus on insulin therapy can monitor their blood glucose levels at home, patients with asthma can objectively monitor their condition by measuring peak expiratory flow rates at home. By taking regular measurements, patients with moderate to severe asthma can prevent severe exacerbations by early intervention. Measurements are obtained at 7 AM and 7 PM each day, as well as before and after the inhalation of bronchodilators. When the peak expiratory flow rate is between 80% and 100% of the patient's personal best, no changes are needed. When it drops to between 50% and